



K051849

## 510(k) SUMMARY

AUG 16 2005

### VITEK® 2 Gram Positive Ertapenem for *Streptococcus pneumoniae*

#### 510(k) Submission Information:

Submitter's Name: bioMérieux, Inc.  
Address: 595 Anglum Road  
Hazelwood, MO 63042  
Contact Person: Nancy Weaver  
Staff Regulatory Affairs Specialist  
Phone Number: 314-731-8695  
Fax Number: 314-731-8689  
Date of Preparation: July 6, 2005

#### B. Device Name:

Formal/Trade Name: VITEK® 2 Gram Positive Ertapenem for *Streptococcus pneumoniae*  
Classification Name: Fully Automated Short-Term Incubation Cycle  
Antimicrobial Susceptibility Device, 21 CFR 866.1645  
Common Name: VITEK 2 AST-GP ETP

#### C. Predicate Device:

VITEK 2 Gram Positive Moxifloxacin for *Streptococcus pneumoniae* (K031865).

#### D. 510(k) Summary:

VITEK® 2 Gram Positive Ertapenem for *Streptococcus pneumoniae* is designed for antimicrobial susceptibility testing of *Streptococcus pneumoniae*. It is intended for use with the VITEK® 2 and VITEK® 2 Compact Systems as a laboratory aid in the determination of *in vitro* susceptibility to antimicrobial agents. The antimicrobial presented in VITEK 2 AST Cards is in concentrations equivalent by efficacy to standard method concentrations in mcg/ml. The VITEK 2 AST Cards are essentially miniaturized versions of the doubling dilution technique for determining the minimum inhibitory concentration (MIC) microdilution methodology.

The bacterial isolate to be tested is diluted to a standardized concentration in 0.45% saline before being used to rehydrate the antimicrobial medium within the card. The VITEK 2 System automatically fills, seals and places the card into the incubator/reader. The VITEK 2 Compact has a manual filling and sealing operation. The VITEK 2 monitors the growth of each well in the card over a defined period of time (up to 18 hours). At the completion of the incubation cycle, a report is generated that contains the MIC value along with the interpretive category result for each antibiotic contained on the card.

VITEK 2 Gram Positive Ertapenem for *Streptococcus pneumoniae* demonstrated substantially equivalent performance when compared with the CLSI (NCCLS) reference agar dilution method, as defined in the FDA Class II Special Controls Guidance Document: Antimicrobial Susceptibility Test (AST) Systems; Guidance for Industry and FDA, Issued Feb. 5, 2003.

#### bioMérieux, Inc.

595 Anglum Road, Hazelwood, Missouri 63042-2320, USA Phone: 314/731-8500 800/638-4835 Fax: 314/731-8700

<http://www.biomerieux-usa.com>

The Premarket Notification (510[k]) presents data in support of VITEK 2 Gram Positive Ertapenem for *Streptococcus pneumoniae*. An external evaluation was conducted with fresh and stock clinical isolates and stock challenge strains. The external evaluations were designed to confirm the acceptability of VITEK 2 Gram Positive Ertapenem for *Streptococcus pneumoniae* by comparing its performance with the CLSI (NCCLS) microbroth dilution reference method. The data is representative of performance on both the VITEK 2 System and VITEK 2 Compact instrument platforms, as evidenced in the AST equivalency study presented in the VITEK 2 Compact 510(k), K050002. VITEK 2 Gram Positive Ertapenem for *Streptococcus pneumoniae* demonstrated acceptable performance of 94.9% overall Category Agreement. Reproducibility and Quality Control demonstrated acceptable results.



DEPARTMENT OF HEALTH & HUMAN SERVICES

AUG 16 2005

Food and Drug Administration  
2098 Gaither Road  
Rockville MD 20850

Ms. Nancy Weaver  
Staff Regulatory Affairs Specialist  
bioMérieux, Inc.  
595 Anglum Road  
Hazelwood, MO 63042-2320

Re: k051849  
Trade/Device Name: VITEK 2<sup>®</sup> Gram Positive Ertapenem for  
*Streptococcus pneumoniae* ( $\leq 0.5$  -  $\geq 8$   $\mu\text{g/ml}$ )  
Regulation Number: 21 CFR 866.1645  
Regulation Name: Fully Automated Short-Term Incubation Cycle Antimicrobial  
Susceptibility Devices  
Regulatory Class: Class II  
Product Code: LON  
Dated: July 6, 2005  
Received: July 7, 2005

Dear Ms. Weaver:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in Title 21, Code of Federal Regulations (CFR), Parts 800 to 895. In addition, FDA may publish further announcements concerning your device in the Federal Register.

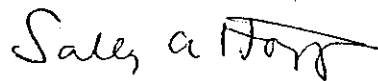
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Parts 801 and 809); and good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820).

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This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific information about the application of labeling requirements to your device, or questions on the promotion and advertising of your device, please contact the Office of *In Vitro* Diagnostic Device Evaluation and Safety at (240)276-0484. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Sally A. Hojvat".

Sally A. Hojvat, M.Sc., Ph.D.  
Director  
Division of Microbiology Devices  
Office of *In Vitro* Diagnostic Device  
Evaluation and Safety  
Center for Devices and  
Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known): K051849

Device Name: VITEK® 2 Gram Positive Ertapenem for *Streptococcus pneumoniae*  
( $\leq 0.5 - \geq 8$  µg/ml)

### Indications For Use:

The VITEK® 2 Antimicrobial Susceptibility Test (AST) is intended to be used with the VITEK® 2 and VITEK® 2 Compact Systems for the automated quantitative or qualitative susceptibility testing of isolated colonies for the most clinically significant aerobic gram-negative bacilli, *Staphylococcus spp.*, *Enterococcus spp.*, *Streptococcus agalactiae*, and *S. pneumoniae*.

VITEK® 2 Gram Positive Ertapenem for *Streptococcus pneumoniae* is designed for antimicrobial susceptibility testing of *Streptococcus pneumoniae*. VITEK 2 Gram Positive Ertapenem for *Streptococcus pneumoniae* is a qualitative test. It is intended for use with the VITEK 2 and VITEK 2 Compact Systems as a laboratory aid in the determination of *in vitro* susceptibility to antimicrobial agents.

Prescription Use   X    
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER  
PAGE IF NEEDED)

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Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD)

  
\_\_\_\_\_  
Division Sign-Off

Office of In Vitro Diagnostic Device  
Evaluation and Safety

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